

CLAIMS

*Sub 2*  
We claim:

1. A system for managing and manipulating computer archive files comprising:  
a user interface integrated with Microsoft Windows Explorer interfacing to a central  
5 directory;  
an file manager including the central directory interfacing with archive files and data object  
files;  
a compression/extraction engine interfacing with the file manager for compressing,  
extracting, encrypting and decrypting archive files and data object files.
- 10 2. The system of claim 1 wherein the user interface includes a shell, a graphical user  
interface and a call level interface.
3. The system of claim 1 wherein the file manager includes the central directory  
which holds the archived files.
- 15 4. The system of claim 1 wherein the compression/extraction engine includes  
compression and extraction algorithms.
5. The system of claim 1 wherein the user interface, file manager and  
compression/extraction engine are integrated into Microsoft Windows Explorer.
6. The system of claim 1 further comprising a mail attachment compressor module  
for automatically compressing email attachments.
- 20 7. The system of claim 6 wherein the mail attachment compressor module is  
implemented within Microsoft Outlook and integrated with the compression/extraction engine.

8. The system of claim 7 wherein the mail attachment compressor module integrates compression into the standard Microsoft Outlook mail message edit form.

9. The system of claim 7 wherein the mail attachment compressor module provides the ability to digitally sign attachments as they are sent.

5 10. The system of claim 7 wherein the mail attachment compressor module adds a Toggle Compression button and an Options button to Microsoft Outlook's standard toolbar.

*Supp*  
11. The system of claim 10 wherein the Options button includes parameters for configuration of digital certificates, passwords and compression method options.

10 12. A method of managing and manipulating computer archive files, the method comprising the steps of:  
integrating a software utility program into Microsoft Windows Explorer; and  
accessing the software utility program to manage and manipulate compressed archive files stored in computer memory.

15 13. The method of claim 12 wherein managing archive files includes opening and viewing the contents of the archive files.

14. The method of claim 12 wherein manipulating archive files includes creating a new archive file.

15. The method of claim 12 wherein manipulating archive files includes modifying an existing archive file.

16. The method of claim 12 wherein manipulating archive files includes extracting archive files.

17. The method of claim 12 wherein manipulating archive files includes encrypting archive files.

5 18. The method of claim 12 further comprising the steps of: installing a mail attachment compression module onto a user's computer; initiating Microsoft Outlook; and enabling the mail attachment feature.

